

### REMARKS

Applicant submits this Amendment and Response to the final Office Action mailed October 21, 2005. In order to ensure full consideration of these claims, a Request for Continued Examination is being submitted herewith.

At the outset, the undersigned thanks the Examiner for the interview with the Examiner and with the inventor, Michael Stephens, on January 18, 2006. Applicant appreciates the opportunity to discuss the current commercial embodiment of the claimed invention. At the Examiner's suggestion, Applicant has amended claim 26 to include a Markush group with respect to the combustible material that is placed inside the package. Claim 26 now corresponds to the formerly indicated as allowable claims 29 and 31.

In the additional new claims, Applicant has rewritten claims 32-34 and 37 in independent form including all of the limitations of the base claim and any intervening claims. These claims have been identified as allowable once rewritten as indicated. Claims 38-41 correspond to claims 32-34 and 37 respectively.

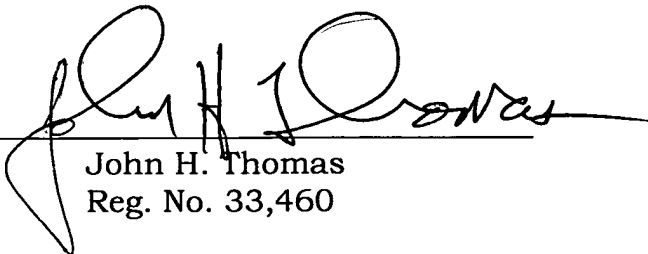
Applicant now submits that all of the claims are in condition for allowance. Favorable action is requested hereon.

Finally, as indicated in the discussion with the Examiner, Applicant is attaching to this response a formal translation of the French WO 03/080770 prior art reference relied upon by the Examiner in the prior Office Action.

The Commissioner is hereby authorized to charge any deficiencies in payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 50-2127.

Respectfully submitted,

Date: January 20, 2006



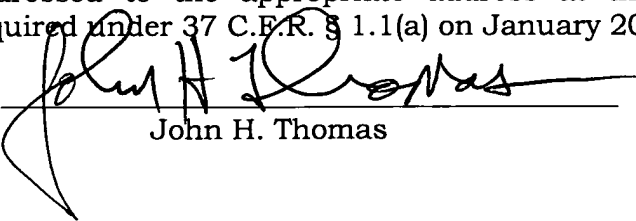
John H. Thomas  
Reg. No. 33,460

536 Granite Avenue  
Richmond, Virginia 23226  
Phone: (804) 344-8130  
Fax: (804) 644-3643  
E-Mail: [info@ip-counsel.net](mailto:info@ip-counsel.net)

#### CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the appropriate address at the U.S. Patent and Trademark Office required under 37 C.F.R. § 1.1(a) on January 20, 2006.

by:



John H. Thomas



## LEGAL LANGUAGE SERVICES

An affiliate of ALS International  
18 John Street  
Suite 300  
New York, NY 10038

Telephone (212) 766-4111  
Toll Free (800) 788-0450  
Telefax (212) 349-0964  
[www.legallanguage.com](http://www.legallanguage.com)

November 11, 2005

To whom it may concern:


This is to certify that the attached translation from French into English is an accurate representation of the document received by this office. This document is designated as:

**DEVICE FOR LIGHTING A FIRE  
WO 03/08770  
PCT/FRO2/01027**


George Alves, Manager Translation Services of this company, certifies that Andrew Bruch, who translated this document, is fluent in French and standard North American English and is qualified to translate.

He attests to the following:

"To the best of my knowledge, the accompanying text is a true, full and accurate translation of the specified document."

  
Signature of George Alves

Subscribed and sworn to before me this 11<sup>th</sup> day of November 2005

  
Rosemary Brto

Notary Public, State of New York  
No. 01BR6077317  
Certificate filed in New York County  
Qualified in Kings County  
Commission Expires July 8, 2006

Sincerely,

Victor J. Hertz  
President & CEO

## DEVICE FOR LIGHTING A FIRE

### TECHNICAL DOMAIN

The invention herein described relates to a device for lighting a barbecue, a fireplace, and a fire in general.

### PRIOR ART

Traditionally, lighting a fire involves the use of paper and, in particular, kindling which is not convenient for city dwellers to procure and store. Today there are more practical products of various kinds, which ignite easily: small solid sticks and a variety of liquids or gels. The dosage of these, however, can be tricky to master, and the flames may need to be repeatedly fanned to obtain suitable cooking embers within a reasonable time. Other more natural products are wood-based or sawdust-based, often with an admixture of wax or paraffin to facilitate ignition. These products, just as with certain inflammable sticks, liquids or gels, may release odors during combustion that are not very compatible with the cooking of foodstuffs.

### DESCRIPTION OF THE INVENTION

The device according to the invention makes it possible to remedy these drawbacks. The device is characterized by the fact that it is purchased "ready-to-assemble" in the form of a thin sheet of inflammable material that takes up little space – preferably pre-cut, grooved wood pulp-board. The device is made up of a grill in the form of a canopy and a ribbed burner. The grill consists of a precut ribbon of inflammable material, preferably spiral in shape, while the ribbed burner is composed of inverted U or V-shaped strips that, after assembly, look like a cross or a star when viewed from above. The grill is set up in a vertical position atop the burner and takes the form of a terraced cone or pyramid with open risers (or the form of any other open-riser, terraced body that broadens towards its base); it conforms to the profile of the burner that supports it. A central opening in the grill together with notches or stops in the head of the burner make it possible for the two units to be coupled or lodged together. The device thus formed is placed in a hearth in advance of any logs or lumps of fuel, thus making it possible for the fire to develop from underneath the fuel, which is piled around the device after fire has been set to the top of the device's burner unit. The device, forming an openwork inflammable structure in the shape of a chimney canopy, thus takes the place that is normally occupied at the center of the hearth by a hard-to-ignite overabundance of fuel. The burner, at the center of the canopy, enjoys maximum draw for its combustion and, with its ribbing, ignites the grill which it supports, as well as the fuel placed above it and around it, from the center outward to the periphery. Light lumps of combustible material are particularly advantageous: their stacked lumps retain a dome-like

arrangement for several minutes after the device has been consumed by the flames. This particularity allows the fuel to continue to self-ventilate for a longer period of time. It is no longer essential to fan the flames, and if, in spite of this, one does so, the combustion process is greatly accelerated. If the device is made of wood fibers and natural resins, without other adulterations, it will not release any unpleasant odors during combustion.

## BRIEF DESCRIPTION OF THE DRAWINGS

The attached drawings illustrate the invention:

Figure 1 shows the precut sheet, seen from above

Figure 2 shows the construction of the burner by folding, seen laterally from a 45° angle.

Figure 3 shows the burner, in the shape of a cross, seen laterally from a 45° angle

Figure 4 shows the disk of the grill, centered atop the burner, seen laterally from a 45° angle

Figure 5 shows the device after the grill has been unwound from atop the burner, seen laterally from a 45° angle

## METHODS FOR PRODUCING THE INVENTION

With reference to these drawings, the device is characterized by the fact that it is purchased in ready-to-assemble form, and may be constructed by the user from a sheet of precut and ribbed inflammable material (1) (Fig. 1 ).

The device contains a grill (2) in the form of an openwork canopy, comprised of a precut ribbon of inflammable material, and a ribbed burner (3) forming a cross or star when viewed from above, and a triangle (or any other shape in which the base is wider than the apex) when viewed in profile; the burner (3) is centered at the heart of the canopy formed by the grill (2) (Fig. 5) and acts as a support for it, allowing the grill (2) generally to retain its shape under the weight of the fuel.

The inflammable material used for manufacturing the precut sheet (1), and used in the construction of the device, is a compact and flexible cardboard, rich in wood fibers and natural resins, preferably produced using resinous wood. This cardboard contains no toxic compounds, such as synthetic glues, for the resin serves as the bond between the wood fibers. Another advantage: this type of cardboard, when burning, releases an intense and sustained heat and remains incandescent for a longer period of time.

The grill (2), viewed from above, may exhibit any desired contour and cut, provided its contour and cut form a ribbon and that this ribbon, once unwound along the vertical axis, forms a hollow, openwork volume, whose base is wider than its apex, and which serves the function of a canopy. The grill (2), viewed from above, may therefore exhibit a circular (fig 1), elliptical, square, rectangular, cruciform, starred, or other cut, and may form, once unwound along the vertical axis, a truncated cone (Fig. 5), a truncated elliptical cone,

a truncated pyramid, a truncated elongated pyramid, a truncated cruciform or starred pyramid, or any other terraced volume which broadens towards the base and narrows towards the top.

In one of the preferred embodiments, the grill (2) is, at the outset, a disk (Fig. 1 and Fig. 4) precut in the form of a spiral or of concentric circles connected, diagonally or otherwise, by an S-shaped ribbon of material (4); the precut disk (2) automatically becomes a grill (2) in the shape of an openwork, tapered canopy when, centered atop the burner, it is unwound downward, along the vertical axis, by the user (Fig. 5).

The grill (2) includes a central opening (5) into which the head (6) of the burner (3) is to be fitted; this opening (5) tends to promote draw as well as the evacuation of smoke.

In one of the preferred embodiments, the central opening (5) of the grill (2) is equipped with a circular "hinged" flap (7) created by the partial cut out of the opening; this flap can be raised to a vertical position prior to or during penetration by the head (6) of the burner (3) at the center of the grill (2) (Fig. 5). This flap (7), if correctly oriented, protects the ignition flame from the wind, and serves in turn, when burning or incandescent, to ignite gases that have escaped without burning; hence the fire is not smothered and the cardboard can be consumed slowly.

The ribbed burner (3) is comprised of a single piece (Fig. 2 and 3) taken from the peripheral area (3) (Fig. 1) of the sheet of precut material (1); its inverted U or V profiles, as well as its shape in the form of a cross or a star, are obtained by creating concave or convex folds along the diagonals and medians, following precut grooves (8 and 9) (Fig. 1, 2, and 3).

In another embodiment, the ribbed burner (3) is comprised of inverted or V- or U-shaped bars or buttresses or cradles assembled in a cross shape or star shape with the help of notches permitting male-female-type linkage; these bars are taken from the corners of the precut sheet of inflammable material.

The head (6) of the burner (3) contains slits or notches (10) which make it possible for the grill (2) to be lodged in the burner (3) by simple abutment or by click-locking after insertion of the head (6) of the burner (3) into the central opening (5) of the grill (2).

The head (6) of the burner (3) contains several openings (11) into which one or more match heads may be introduced in order to set it alight.

## PREFERRED METHOD FOR PRODUCING AN EMBODIMENT OF THE INVENTION

With reference to these drawings, the preferred method for producing an embodiment of the invention is characterized by the selection of a sheet of inflammable material (1) made of wood pulp-board manufactured using resinous wood.

The sheet of wood pulp-board (1) is square (Fig. 1) and precut into two parts: a central part in the shape of a disk (2) and a second peripheral part with a circular inner contour and an outer square contour (3).

The peripheral part (3) (Fig. 1) is used to produce the ribbed burner (3) (Fig. 2 and 3) as a single piece via concave folding along medians and ridged diagonals marked out by pre-established grooves (8 and 9).

The disk (2) is precut in a spiral shape or in concentric circles connected by an S-curve (4) and contains approximately six whorls; it will be used to form the tapered grill (2) that serves as the canopy when it is centered atop the burner (Fig. 4) and unfolded downwards by the user along the vertical axis (Fig. 5).

The grill (2) includes a central circular opening (5) into which the head (6) of the burner (3) is to be fitted; this opening (5) tends to promote draw as well as the evacuation of smoke.

The central opening (5) of the grill (2) is equipped with a circular "hinged" flap (7) created by the partial cut out of the opening (5); this flap can be raised to a vertical position (Fig. 4 and 5) prior to or during penetration by the head (6) of the burner (3) at the center of the grill (2).

The head (6) of the burner (3) includes slits forming right angles (10) which make it possible for the grill (2) to be lodged in the burner (3) by simple abutment.

The head (6) of the burner (3) contains openings (11) originally located at the corners of the sheet of wood pulp-board (Fig. 1); one or more match heads may be introduced into these openings in order to set the burner alight.

As a non-limiting example: the dimensions of the sheet of wood pulp-board (1) are 24 cm x 24 cm x 0.125 cm; the disk or grill (2) has a diameter of 18 cm; the burner (3) has a height of 10 cm and a base identical to that of the grill (2); the central opening (5) of grill (2) has a diameter of 3.5 cm, identical to that of the "hinged" flap (7) and that of the head (6) of the burner (3), whose openings (11) for purposes of lighting have a diameter of 1.2 cm. The fire starter, once set up (Fig. 5) will have dimensions on the order of 11 cm for its height, and 18 cm for its base diameter. The width of each of the 6 whorls of the grill (2) is 1.2 cm.

## POTENTIAL FOR INDUSTRIAL APPLICATION

The device according to the invention is intended for a very wide public and must be mass-produced; the raw materials and the techniques for the production of the invention exist: wood pulp-board is produced in several countries, including France, and the cutting of the sheets is effected using rolls of cardboard, employing cutout "templates" mounted on rotary presses.

Other materials, such as peeled poplar wood may be considered for the manufacture of the device; the cutting of sheets would then be carried out by means of vertical stamping using cutout "templates" mounted on presses.



## PATENT CLAIMS

1) A device for lighting a barbecue, a fireplace, and a fire in general, characterized by the fact that can be assembled by the user from a sheet of precut, grooved, inflammable material (1) (Fig. 1), and by the fact that it consists of a grill (2) in the form of an openwork canopy made out of a ribbon of precut inflammable material, and a ribbed burner (3) that looks like a cross or a star when viewed from above and like an upright triangle, or any other profile whose base is wider than its apex, when viewed in profile (Fig. 3); the burner (3) is centered at the heart of the canopy formed by the grill (2) and acts as a support for it (Fig.5).

2) A device pursuant to claim 1, characterized by the fact that the inflammable material used for the manufacture of the precut sheet (1) is a wood pulp-board produced using resinous wood.

3) A device pursuant to claim 1, characterized by the fact that, viewed from above, the grill may exhibit any desired contour or cut, provided its contour and cut form a ribbon and that this ribbon, once unwound along the vertical axis, forms a hollow, openwork volume, whose base is wider than its apex, and which serves the function of the canopy. The grill (2), viewed from above, may therefore exhibit a circular (Fig. 1), elliptical, square, rectangular, cruciform, starred, or other cut, and may form, once unwound along the vertical axis, a truncated cone (Fig. 5), a truncated elliptical cone, a truncated pyramid, a truncated elongated pyramid, a truncated cruciform or starred pyramid, or any other terraced volume which broadens towards the base and narrows towards the top.

4) A device pursuant to claim 1, characterized by the fact that the grill (2) is, at the outset, a disk precut (2) in the form of a spiral or of concentric circles connected, diagonally or otherwise, by an S-shaped ribbon of material (4) (Fig. 1 and Fig. 4); the precut disk automatically becomes a grill (2) in the shape of a canopy or terraced, tapered support for the fuel when, centered atop the burner (3) (Fig.4), it is unwound downward, along the vertical axis, by the user (Fig. 5).

5) A device pursuant to claim 1, characterized by the fact that the grill (2) includes a central opening (5) into which the head (6) of the burner (3) is to be fitted (Fig. 5).

6) A device pursuant to claim 5, characterized by the fact that the central opening (5) of the grill (2) is equipped with a "hinged" flap (7) created by the partial cutout of the opening (5); this flap may be raised to a vertical position (Fig. 4 and Fig. 5).

7) A device pursuant to claim 1, characterized by the fact that the ribbed burner (3) is comprised of a single piece (Fig. 2 and Fig. 3) taken from the

peripheral area (3) (Fig. 1) of the sheet of precut material (1); its inverted U or V profiles, as well as its shape in the form of a cross or star, are obtained by creating concave or convex folds along the diagonals and medians, along precut grooves (8 and 9) (Fig. 1, Fig. 2, Fig. 3).

8) A device pursuant to claim 1, characterized by the fact that the ribbed burner (3) is comprised of inverted U- or V-shaped bars or buttresses or cradles assembled in a cross or star shape with the help of notches permitting a mail-female-type linkage.

9) A device pursuant to claim 5, characterized by the fact that the head (6) of the burner (3) contains slits or notches (10) which make it possible for the grill (2) to be lodged in the burner (3) by simple abutment or by click-locking after insertion of the head (6) of the burner (3) into the central opening (5) of the grill (2).

10) A device pursuant to claim 1, characterized by the fact that the head (6) of the burner (3) contains one or more openings (11).